

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
24 February 2005 (24.02.2005)

PCT

(10) International Publication Number
WO 2005/016228 A3

- (51) International Patent Classification⁷: C07D 213/02, A61K 31/44
- (21) International Application Number: PCT/IL2004/000745
- (22) International Filing Date: 12 August 2004 (12.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 157397 14 August 2003 (14.08.2003) IL
- (71) Applicants (*for all designated States except US*): D-PHARM LTD. [IL/IL]; Kiryat Weizmann Science Park, IL-76326 Rehovot (IL). ADVANCED NEUROPROTECTIVE SYSTEMS LTD. [IL/IL]; Kiryat Weizmann Science Park, IL-70400 Nes Ziona (IL).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): DOLINA, Svetlana [IL/IL]; 8 Naphtali Ben Ephraim St., IL-76555 Rehovot (IL). SHTEIMAN, Vitaly [IL/IL]; Sheshet Hayamim 35/22, IL-67295 Tel Aviv (IL). VINNIKOVA, Marina [IL/IL]; 1 Aharon Bouganium Street, IL-75122 Ramla (IL). SHAPIRO, Israel [IL/IL]; 1 Aharon Bouganium Street, IL-75122 Ramla (IL).
- (74) Agent: WALKER, Naomi; Kiryat Weizmann Science Park, P.O. Box 2313, IL-76123 Rehovot (IL).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
19 May 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/016228 A3

(54) Title: COMPOSITIONS AND METHODS FOR REDUCING THE RISK OF EPILEPTIC OCCURRENCE AND/OR FOR TREATMENT OF SEIZURE DISORDERS

(57) Abstract: The present invention relates to compounds and compositions useful for reducing the risk of epileptic occurrences and/or for alleviating epileptic phenomena in patients. In accordance with the invention, the compounds and compositions have at least the following two components: a) vitamin B6-based component selected from pyridoxal, pyridoxamine, pyridoxine, their pharmaceutically acceptable functional derivatives and salts; and b) at least one antiepileptic drug (AED) or anticonvulsive, neuro-protective drug or nootrope compound or moiety. The invention further relates to methods for preventing epileptic episodes and for alleviating epileptic episodes, as well as methods for reducing side effects of antiepileptic drugs.